

Updated: August 26, 2008

Georgia Department of Transportation ESPCP General Notes Template

These are typical notes that the Department is providing. Project specific conditions and permit requirements will warrant the modification of these notes in order to comply with the applicable NPDES permit. The Certified Design Professional shall provide additional notes and modifications as necessary to ensure full compliance with the NPDES permit. Any wording in the Department's ESPCP Notes Template that is in *italics* is intended to be an instruction or special guidance and shall be deleted prior to placing on a set of plans.

For questions regarding this ESPCP General Notes Template, contact the Department's hydraulic engineers, Eugene Hopkins or Brad Ehrman, Office of Road Design, at (404)-631-1978.

ESPCP GENERAL NOTES:

The escape of sediment from the site shall be prevented by the installation of erosion and sediment control measures and practices prior to, or concurrent with, land disturbing activities.

Erosion control measures will be maintained at all times. If full implementation of the approved plan does not provide for effective erosion control, additional erosion and sediment control measures shall be implemented to control or treat the sediment source.

PLAN ALTERATIONS

The Erosion Sedimentation and Pollution Control Plan (ESPCP) is provided by the Department. It addresses the staged construction of the project based on common construction methods and techniques. If the Contractor elects to alter the stage construction from that shown in the plans or utilize construction techniques that render this plan ineffective, the Contractor shall revise the plans in accordance to Special Provision 161 of the contract.

The Contractor, the Certified Design Professional and the WECS shall carefully evaluate this plan prior to commencing land disturbing activities. A major modification or deletion of structural BMP's with a hydraulic component requires a formal revision of the ESPCP and the signature of a GSWCC level-II-certified design professional. Additional BMP's may be added per Special Provision 161 – Control of Soil Erosion and Sedimentation.

TEMPORARY MULCHING

EPD General Permit GAR 100002 states that "Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding." – However, the Department typically requires disturbed areas to be stabilized every 7 days. The construction documents, special provisions, or specifications may require mulching more often than 7 days.

VEGETATION AND PLANTING SCHEDULE

All temporary and permanent vegetative practices including plant species, planting dates, seeding fertilizer, lime and mulching rates for this project can be found in section 700 of the current edition of the Department's specifications and other applicable contract documents, special provisions, or landscaping plans.

SEQUENCE OF MAJOR ACTIVITIES

The Contractor is responsible for developing the construction schedule for the project. The construction schedule for this project shall be submitted with the NOI. A copy of the construction schedule shall be maintained at the project site.

(Replace this paragraph with a narrative statement here that describes the sequence of BMP installations for each stage of construction. At a minimum, statements about Sub stage 1a, which is generally concurrent with clearing operations and all major stages are required. Other Sub stages may be needed. The narrative statement must address the installation of all sediment basins, initial BMPs, intermediate BMPs, and BMPs for final stabilization.)

PETROLEUM STORAGE, SPILLS AND LEAKS

The plans provided herein do not anticipate the storage of petroleum products onsite. The Contractor shall at a minimum provide an action plan and keep the necessary materials on site for the capture and disposal of any petroleum product leaks or spills associated with the servicing, refueling or operation of any equipment utilized in the work. A copy of the action plan shall be submitted to the Project Engineer and maintained on the project site. All personnel operating or servicing equipment shall be familiar with this plan. The Contractor shall not park, refuel, or maintain equipment within stream buffers.

If the Contractor elects to store petroleum products on site, the Contractor shall prepare an ESPCP addendum that addresses the additional BMPs needed for onsite storage and spill prevention for petroleum products. This plan shall be prepared by a Certified Design Professional as required by GAR100002 for inclusion with these plans. The Contractor's attention is specifically directed to Standard Specification 107-Legal Regulations and Responsibility to the public for additional requirements.

SOIL SERIES INFORMATION

(Use all notes in the soil series section that are applicable to this project.)

(Use the following note if a soil survey has been performed on the project site)

A project specific soil survey and geotechnical investigation was performed for this project and can be made available upon request. Soil characteristics have been given full consideration in the hydrologic analysis, the design of channels and linings, selection of temporary BMP's, design of energy dissipaters, and the in the selection of permanent vegetation and fertilizers.

*(Use the following note if soil series information is available on the NRCS's website:
<http://websoilsurvey.nrcs.usda.gov/>)*

The following is a summary of the soils that are expected to be found on the project site:

(transcribe the information found on the “Land management => Erosion Hazard (road, Trail)” report that is generated from the NRCS soil survey website here)

Due to the size and scope of this project and the nature of soil series maps, it is not reasonably possible to identify the precise locations of the above reference soils on the plans. The NRCS soil survey and soil series maps for the project area are also available online at <http://websoilsurvey.nrcs.usda.gov/>.

(Use the following note for projects that disturb more than one acre when NRCS web soil survey information is not available.)

NRCS soil information is not available for this project site.

POST-CONSTRUCTION BMP'S

(As per Part IV D 3 b of GAR 100002, the Designer shall include in this section “a description of measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed.” The following is only an example; the designer shall provide a project specific note in this section.

All permanent, post-construction BMP's are shown in the construction plans and in the ESPCP plan. The post-construction BMP's for this project may consist of permanent detention ponds, filter basins, vegetation, permanent slope drains and/or flumes, rip-rap at pipe outlets for velocity dissipation and outlet stabilization, vegetated swales/ditches where practical, channel/ditch stabilization with Turf Reinforcing Mats, rip-rap and concrete ditch lining where necessary. The post-construction BMP's will provide permanent stabilization of the site and prevent accelerated transportation of sediment and pollutants into receiving waters.)

SILT FENCE INSTALLATIONS WITH J-HOOKS AND SPURS

Silt fence should never be run continuously. The silt fence should turn back into the fill or slope to create small pockets that trap silt and force stormwater to flow through the silt fence. This technique, or configuration, is commonly referred to as J-hooks or spurs. The J-hooks shall be utilized on all silt fences that are located around the perimeter of the project and along the toe of embankments or slopes. The J-hooks shall be spaced in accordance with the Typical Location Details for silt fences/baled straw. Spacing for J-hooks shall not be less than 50 feet except as noted. Silt fences that are near the outlet of culverts, cross drains, and storm drains shall have a minimum of three (3) J-Hooks on both sides of the structure at spacing not to exceed 30 feet. J-Hooks shall be paid for as silt fence items per foot. All costs and other incidental items are included in cost of installing and maintaining the silt fence.

MAINTENANCE AND STABILIZATION MEASURES

See Special Provision 161 and 700 and other contract documents for maintenance and stabilization measures.

WASTE DISPOSAL

Where attainable, locate waste collection areas, dumpsters, trash cans and portable toilets at least 50 feet away from streets, gutters, watercourses and storm drains. Secondary containment shall be provided around liquid waste collection areas to minimize the likelihood of contaminated discharges. The Contractor shall comply with applicable state and local waste storage and disposal regulations and obtain all necessary permits. Solid materials, including building materials, shall not be discharged to Waters of the State, unless authorized by a Section 404 Permit.

INSPECTIONS

All inspections shall be documented on the appropriate Department inspection forms. See Special Provision 167 and other contract documents for inspection requirements. These inspections shall continue until the Notice of Termination (NOT) is submitted.

Failure to perform inspections as required by the contract documents and the NPDES permit shall result in the cessation of all construction activities with the exception of Traffic Control and Erosion Control. Continued failure to perform inspections shall result in non-refundable deductions as specified in the contract documents.

By agreement with Georgia EPD, the Department's Construction Project Engineer will be responsible for the seven day inspections required for new BMP installations.

NON-STORM WATER DISCHARGES

Non-storm water discharges defined in Part III.A.2 of the NPDES Permit will be identified after construction has commenced. These discharges shall be subject to the same requirements as storm water discharges required by the Georgia Erosion and Sedimentation Control Act, the NPDES Permit, the Clean Water Act, the Manual for Erosion and Sediment Control in Georgia, Department Standards, and contract documents.

DE-WATERING ACTIVITIES AND USE OF PUMPS

Any pumped discharge from an excavation or disturbed area shall be routed through an appropriately sized sediment basin, silt filter bag or shall be treated equivalently with suitable BMP's. The contractor shall ensure the post BMP treated discharge is sheet flowing. Failure to create sheet flow will obligate the contractor to perform water quality sampling of their pumped

discharges. The contractor shall prepare sampling plans in accordance with the current GAR100002 NPDES permit utilizing by a Certified Design Professional. No separate payment will be made for water quality sampling of pump discharges.

OTHER CONTROLS

The Contractor shall follow this ESPCP and ensure and demonstrate compliance with applicable State and/or local waste disposal, sanitary sewer or septic system regulations.

The Contractor shall control dust from the site in accordance with Section 161 of the current edition of the Department's Specifications.

SEDIMENT STORAGE

The following table summarizes the required and available sediment storage for every outfall on this project. The Contractor shall provide and maintain the storage volumes for the BMPs specified in this table.

(Customize the following table as necessary; all outfalls must be represented in this table. The table must include: Total drainage area, disturbed area, required sediment storage volume, total storage volume, and a demonstration on how the individual BMP storage add up to at a minimum, the total storage volume.)

| Outfall ID | Total Drainage area (acres) | Disturbed area (acres) | Required Sediment storage Volume (yd ³) | Total Storage volume provided (yd ³) | Sediment Basins | | Check Dam (??? yd ³ each) | | Inlet sediment Traps (??? yd ³ each) | |
|------------|-----------------------------|------------------------|---|--|-----------------|--------------|--------------------------------------|--------------|---|--------------|
| | | | | | Pond # | Total Volume | # of Devices | Total Volume | # of Devices | Total Volume |
| | | | | | | | | | | |
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In order to prevent runoff from bypassing inlet sediment traps, a temporary berm shall be installed on the downstream side of all inlet sediment traps that are not located in a low point or an excavated sump. Temporary berms, when necessary, shall be a minimum of 18" high and constructed in a manner that ensures stormwater does not bypass the inlet. The Contractor may submit alternate temporary containment berm designs to the Project Engineer for approval.

(If the total storage volume provided is less than the required sediment storage volume, the Design Professional must provide a detailed explanation stating how the outfall is protected in the absence of adequate sediment storage volume.)

(The following section, DISCHARGES INTO, OR WITHIN ONE MILE UPSTREAM OF AND WITHIN THE SAME WATERSHED AS, ANY PORTION OF A BIOTA IMPAIRED STREAM SEGMENT, is required for projects where the NOI will be submitted on or after January 1, 2009.)

DISCHARGES INTO, OR WITHIN ONE LINEAR MILE UPSTREAM OF AND WITHIN THE SAME WATERSHED AS, ANY PORTION OF A BIOTA IMPAIRED STREAM SEGMENT

(Choose the appropriate note below and modify accordingly a list of impaired stream can be found at: www.gaepd.org/Documents/305b.html)

All outfalls are either located further than 1 linear mile upstream or outside of the watershed of an Impaired Stream Segment that has been listed for criteria violated, “Bio F” (impaired Fish Community) and/or “Bio M” (Impaired Macro invertebrate Community), within Category 4a, 4b or 5, and the potential cause is either “NP” (nonpoint source) or “UR” (urban runoff).

The following is a summary of project outfalls within 1 mile and within the watershed of an identified Impaired Stream Segment that has been listed for criteria violated, “Bio F” (impaired Fish Community) and/or “Bio M” (Impaired Macro invertebrate Community), within Category 4a, 4b or 5, and the potential cause is either “NP” (nonpoint source) or “UR” (urban runoff).

| Outfall Location(s) | Basin Name | Reach Name | Location of the impaired stream segment as indicated in the 305b/303d list | Criteria Violated (Bio F or Bio M) | Potential Cause (NP or UR) | Category (4a, 4b or 5) | Numeric waste load allocation for sediment* |
|---|------------|------------|--|------------------------------------|----------------------------|------------------------|---|
| | | | | | | | |
| <i>List the additional BMPs from part III C 2 of GAR 100002 used for this watershed (a minimum of 4 are required) and if part III C 1 is applicable discuss how the waste load allocation for sediment is addressed.</i> | | | | | | | |
| | | | | | | | |
| <i>List the additional BMPs from part III C 2 of GAR 100002 used for this watershed (a minimum of 4 are required) and if part III C 1 is applicable discuss how the waste load allocation for sediment is addressed.</i> | | | | | | | |
| | | | | | | | |
| <i>List the additional BMPs from part III C 2 of GAR 100002 used for this watershed (a minimum of 4 are required) and if part III C 1 is applicable discuss how the waste load allocation for sediment is addressed.</i> | | | | | | | |

**** If the TMDL Implementation Plan establishes a specific numeric waste load allocation that applies to the project discharge(s) to the Impaired Stream Segment, then the Certified Design Professional must incorporate that allocation into the Erosion, Sedimentation and Pollution Control Plan and implement all necessary measures to meet that allocation.***

STREAM BUFFER ENCROACHMENT

Stream Buffers (*are/are not*) impacted by this project.

The Contractor is not authorized to enter into stream buffers, except as described in the table below:

| Name (name or number of feature) | Location of Buffered Streams and State Waters** | | | Stream Type (Warm/Cold Water)* | Buffer Impacted? (Yes/No) | Buffer Variance Required? |
|--|---|-------------------------|------------------------|---|---------------------------------|---------------------------------|
| | Alignment | Begin Sta (LT or RT) | End Sta. (LT or RT) | | | |
| | | | | | | |
| <i>Describe the Allowable activities and/or restrictions within the buffer and approximate location of impacts.</i> | | | | | | |

*Warm water streams have a 25-foot minimum buffer as measured from the wretched vegetation. Cold Water streams have a 50-foot buffer as measured from the wretched vegetation.

** Locations are approximate, a detailed location of stream buffers and authorized work areas are shown on the individual BMP sheets.

MONITORING GENERAL NOTES:

Representative sampling may be utilized on this project. The characteristics of the individual watersheds along the project corridor have been carefully evaluated and compared on the basis of drainage characteristics, watershed size, land disturbance and earth work. After evaluation of these items as presented in the projects drainage area maps, hydrology and hydraulic studies, construction plans and erosion sedimentation and pollution control plans, it has been determined that the increase in turbidity at the specified locations will be representative of the increase in turbidity for all waters leaving the site. Approved primary and alternate representative monitoring sites are identified in the table:

| Monitoring Site | Primary or Alternate site | Location (Sta. and side) | Name of Receiving water. | Applicable construction stage for monitoring | Sampling Type (Outfall or Receiving Water) | Drainage Area (For the receiving water) | Disturbed area | Warm or Cold water Stream | Appendix B NTU value (Outfall Monitoring Only) | Allowable NTU increase (For Receiving Water) | Location Description |
|-----------------|---------------------------|--------------------------|--------------------------|--|--|---|----------------|---------------------------|--|--|----------------------|
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(According to the EPD, additional monitoring sites may be required depending on significant changes in typical sections)

The primary site specified should be used as the initial sampling location. The alternate sampling sites may be used if additional sampling is required and/or if the primary sampling site is no longer located within the active phase of construction.

MONITORING SAMPLING METHODS & PROCEDURES

See Special Provision 167 and other contract documents for Monitoring Sampling Methods and Procedures.

READY MIX CHUTE WASH-DOWN

The washing of ready-mix concrete drums and dump truck bodies used in the delivery of portland cement concrete is prohibited on this site. In accordance with standard Specification 107 - Legal Regulations and Responsibility to the Public, only the discharge "chute" utilized in portland cement concrete delivery may be rinsed free of fresh concrete remains. The Contractor shall excavate a pit outside of State water buffers, at least 25 feet from any storm drain and outside of the travel way, including shoulders, for a wash/pit area. The pit shall be large enough to store all wash-down water without overtopping the pit. Immediately After the wash-down operations are completed and after the wash-down water has soaked into the ground, the pit shall be filled in, and the ground above shall be graded to match the elevation of the surrounding areas smoothed out. Alternate wash down plans must be approved by the Project Engineer.

Wash-down plans describe procedures that prevent wash down water from entering streams and rivers. Never dispose of wash-down water down a storm drain. Establish a wash-down water pit location that includes the following: (1) the pit is located away from a storm drain, stream or river, (2) the pit is accessible to the vehicle being used for wash-down, (3) the pit has enough volume for wash-down water, and (4) make sure you have permission to use the area for wash-down. On some sites, you may not have permission or access to a location which allows for a wash-down pit. In those cases, the Contractor may have to wash-down into a wheelbarrow or other container and carry the container for transport to a proper disposal site. For additional information, refer to the Georgia Small Business Environmental Assistance Program's "A Guide for Ready Mix Chute/Hopper Wash-down".

EROSION SEDIMENTATION POLLUTION CONTROL CHECKLIST:

(Include the completed applicable GSWCC checklist here.)